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400 GARDEN CITY PLAZA  
SUITE 300  
GARDEN CITY, NY 11530  
516-742-4343  
FAX: 516-742-4366  
E-MAIL: INTPROP@SSMP.COM  
WWW.SSMP.COM

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LEOPOLD PRESSER  
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THOMAS SPINELLI  
XIAOCHUN ZHU

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Re: USSN: 10/589,216  
Lloyd S. Gray, et al.  
Our Docket: 18467

MARVIN BRESSLER  
RICHARD J. DANYKO  
DENNIS J. DUNCAN†  
THEODORE GOTTLIEB  
ARTI KANE  
HARRY A. HILD  
EUNHEE PARK  
MICHAEL A. PETROCELLI\*  
DARRELL L. POGUE  
GREGORY SPEKTOR  
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JOHN F. VODOPIA  
SETH M. WEINFELD  
KEITH A. WELTSCH\*  
ZHUANG YUAN\*

Dear Sirs:

The Filing Receipt for the above-identified patent application does not list the Assignment For Published Patent Application Information. Also the title has an error in it. It should read as follows:

**Assignment For Published Patent Application**  
**University Of Virginia Patent Foundation, Charlottesville, Virginia**

**Title: "INHIBITING CAV3 ISOFORMS AND THE δ 25B SPLICE VARIANTS FOR THE DIAGNOSIS AND TREATMENT OF CANCER"**

as indicated on the enclosed pages. Please make the corrections and send us a corrected Filing Receipt.

Very truly yours,

*[Handwritten signature of Scully, Scott, Murphy & Presser]*  
Scully, Scott, Murphy & Presser, P.C.

SSM&P/bb  
Encl.

PATENT AGENTS  
LESLIE S. SZIVOS, PH.D.  
BYEONGJU PARK, PH.D.  
JOHN PYUN  
QIAN ZHANG  
EDMUND GUTIERREZ, PH.D.  
ANIKET PATEL

COUNSEL  
RICHARD L. CATANIA  
BARRY M. KRIVISKY  
ALLEN R. MORGANSTERN  
ALEK P. SZECZY  
STEPHEN A. YOUNG

TECHNICAL CONSULTANTS  
DOMINICK A. TUCCIO  
HESONG CAO  
SACHIN KANDHARI

RETIRED  
JOHN F. SCULLY  
STEPHEN D. MURPHY

ANTHONY C. SCOTT  
1931-1994

\*OH BAR ONLY  
\*DC AND MD BAR ONLY  
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\*NJ BAR ONLY



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
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APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	TOT CLAIMS	IND CLAIMS
10/589,216	01/15/2008	1642	1015	18467	15	8

CONFIRMATION NO. 5782

## FILING RECEIPT



23389  
SCULLY SCOTT MURPHY & PRESSER, PC  
400 GARDEN CITY PLAZA  
SUITE 300  
GARDEN CITY, NY 11530

Date Mailed: 03/31/2008

Receipt is acknowledged of this non-provisional patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Filing Receipt Corrections. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections**

## Applicant(s)

Lloyd S. Gray, Louisa, VA;  
Timothy L. MacDonald, Charlottesville, VA;

Power of Attorney: The patent practitioners associated with Customer Number 23389

## Domestic Priority data as claimed by applicant

This application is a 371 of PCT/US2005/004281 02/11/2005  
which claims benefit of 60/543,756 02/11/2004

## Foreign Applications

If Required, Foreign Filing License Granted: 03/18/2008

The country code and number of your priority application, to be used for filing abroad under the Paris Convention,  
is **US 10/589,216**

Projected Publication Date: 07/03/2008

Non-Publication Request: No

Early Publication Request: No

**\*\* SMALL ENTITY \*\***

**Title**

Inhibiting Cav3 Isoforms and the 25B Splice Variants for the Diagnosis and Treatment of Cancer

**Preliminary Class**

530

**PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES**

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at <http://www.uspto.gov/web/offices/pac/doc/general/index.html>.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, <http://www.stopfakes.gov>. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4158).

**LICENSE FOR FOREIGN FILING UNDER**

**Title 35, United States Code, Section 184**

**Title 37, Code of Federal Regulations, 5.11 & 5.15**

**GRANTED**

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as

set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

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No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).



DOCKET NO. 18467

**DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION**

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

**INHIBITING CAV3 ISOFORMS AND THE 525B SPLICE VARIANTS FOR THE DIAGNOSIS AND TREATMENT OF CANCER**

the specification of which

(check one)

☐ is attached hereto.

☒ was filed on February 11, 2005 as a ~~United States Application No.~~ or PCT International Application  
Serial No. PCT/US2005/004281  
and was amended on \_\_\_\_\_  
(if applicable)

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in Title 37 Code of Federal Regulations, Section 1.56.

I hereby claim the benefit under Title 35, United States Code, Section 119(e) of any United States provisional application(s) listed below:

60/543,756  
(Application Number)

February 11, 2004  
(Filing Date)

\_\_\_\_\_  
(Application Number)

\_\_\_\_\_  
(Filing Date)

I hereby claim the benefit under Title 35, United States Code, Section 120 of any United States application(s), or Section 365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35, United States Code, Section 112, I acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in Title 37, C.F.R., Section 1.56 which became available between the filing date of the prior application and the national or PCT International filing date of this application.

\_\_\_\_\_  
Application Serial No.

\_\_\_\_\_  
Filing Date

\_\_\_\_\_  
Status

\_\_\_\_\_  
Application Serial No.

\_\_\_\_\_  
Filing Date

\_\_\_\_\_  
Status

**TRANSMITTAL LETTER TO THE UNITED STATES  
DESIGNATED/ELECTED OFFICE (DO/EO/US)  
CONCERNING A SUBMISSION UNDER 35 U.S.C. 371**

ATTORNEY'S DOCKET NUMBER

18467

U.S. APPLICATION NO. (If known, see 37 CFR 1.5)

To be assigned

INTERNATIONAL APPLICATION NO.  
PCT/US2005/004281

INTERNATIONAL FILING DATE  
11 February 2005 (11.02.2005)

PRIORITY DATE CLAIMED  
11 February 2004 (11.02.2004)

TITLE OF INVENTION

INHIBITING CAV3 ISOFORMS AND THE  $\delta$  25B SPLICE VARIANTS FOR THE DIAGNOSIS AND  
TREATMENT OF CANCER

← TITLE

APPLICANT(S) FOR DO/EO/US

Lloyd S. Gray  
Timothy L. MacDonald

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a submission under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a submission under 35 U.S.C. 371.
3. ☐ This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (24) indicated below.
4. ☐ The US has been elected (Article 31).
5. ☒ A copy of the International Application as filed (35 U.S.C. 371 (c)(2))
  - a. ☐ is attached hereto (required only if not communicated by the International Bureau).
  - b. ☐ has been communicated by the International Bureau.
  - c. ☒ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☐ An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).
  - a. ☐ is attached hereto.
  - b. ☐ has been previously submitted under 35 U.S.C. 154(d)(4).
7. ☐ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371 (c)(3))
  - a. ☐ are attached hereto (required only if not communicated by the International Bureau).
  - b. ☐ have been communicated by the International Bureau.
  - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
  - d. ☐ have not been made and will not be made.
8. ☐ An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☐ An oath or declaration of the inventor(s) (35 U.S.C. 371 (c)(4)).
10. ☐ An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371 (c)(5)).
11. ☐ A copy of the International Preliminary Examination Report (PCT/IPEA/409).
12. ☐ A copy of the International Search Report (PCT/ISA/210).

Items 13 to 23 below concern document(s) or information included:

13. ☐ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
14. ☐ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
15. ☒ A **FIRST** preliminary amendment.
16. ☐ A **SECOND** or **SUBSEQUENT** preliminary amendment.
17. ☐ A substitute specification.
18. ☐ A power of attorney and/or change of address letter.
19. ☐ A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 - 1.825.
20. ☐ A second copy of the published International Application under 35 U.S.C. 154(d)(4).
21. ☐ A second copy of the English language translation of the International Application under 35 U.S.C. 154(d)(4).
22. ☒ Express Mail Label No. EV894910755US

U.S. APPLICATION NO (if known, see 37 CFR 1.5)	INTERNATIONAL APPLICATION NO. <b>PCT/US2005/004281</b>	ATTORNEY'S DOCKET NUMBER <b>18467</b>
<b>To be assigned</b>		
23. Other items or information: Courtesy Copy of International Application One (1) Sheet of Drawing Applicant: University of Virginia Patent Foundation of Charlottesville, VA No search report has been received to date		
ASSIGNMENT FOR PUBLISHED PATENT APPLICATION INFORMATION		
The following fees have been submitted: 24. <input checked="" type="checkbox"/> Basic national fee ..... \$300		<b>CALCULATIONS</b> \$ 300.00
25. <input checked="" type="checkbox"/> Examination fee (37 CFR 1.492(c)) If the written opinion of the ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article All other situations. .... \$200		\$ 200.00
26. <input checked="" type="checkbox"/> Search fee (37 CFR 1.492(b)) If the written opinion of the ISA/US or the international preliminary examination report by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)... \$0 Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the as an International Searching Authority. .... \$100 International Search Report prepared by an ISA other than the US and provided to the previously communicated to the US by the IB. .... \$400 All other situations. .... \$500		\$ 100.00
<b>TOTAL OF 24, 25 and 26 =</b>		\$ 600.00
<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.		
Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (round up to a whole)
23 - 100 =	0 /50 =	0
		x \$250.00
Surcharge of \$130.00 for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)).		\$ 130.00
CLAIMS	NUMBER FILED	NUMBER EXTRA
Total claims	* 15 - 20 =	0
Independent claims	* 8 - 3 =	5
MULTIPLE DEPENDENT CLAIMS (if applicable) <input type="checkbox"/> + \$360.00		\$ 0.00
<b>TOTAL OF ABOVE CALCULATIONS =</b>		\$ 1,730.00
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2.		\$ 865.00
<b>SUBTOTAL =</b>		\$ 865.00
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).		\$ 0.00
<b>TOTAL NATIONAL FEE =</b>		\$ 865.00
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40 per property +		\$ 0.00
<b>TOTAL FEES ENCLOSED =</b>		\$ 865.00
*please see preliminary amendment for claim count.		Amount to be \$
		Amount to be \$

## ASSIGNMENT

WHEREAS, the **University of Virginia**, 314 Madison Hall, P. O. Box 400301, Charlottesville, Virginia 22904-4301 (the "Assignor") possesses the right, title and interest for and in an invention entitled

~~Antibody Against Cytosine and Guanine Nucleic Acid Sequences and Diagnosis and Treatment of Cancer~~

described in U. S. Patent Application Serial No. 60/543,756 filed on February 11, 2004; US2005/004281 filed 11 February 2005 for which national stage was entered in Australia, Canada, Europe, Japan and the U.S. (10/589,216) and all subsequent patent applications claiming priority thereto; and

WHEREAS, the **University of Virginia Patent Foundation**, a non-profit organization having a place of business at 250 West Main Street, Suite 300, Charlottesville, Virginia 22902 (the "Assignee") is desirous of acquiring the entire right, title and interest in and to the aforesaid invention, including any tangible materials embodied in or encompassed by the invention and any trade secrets pertaining to the invention, and any improvements thereon, (the "Invention") and in and to said applications for Letters Patent thereon in the United States, its territories and possessions ("United States") and all foreign countries, including rights to claim priority, to any provisional applications, and in and to any Letters Patent of the United States or any foreign country which may be granted therefor, including any and all reissues, divisions, continuations, continuations-in-part, renewals, substitutes, or extensions thereof (the "Rights");

NOW, THEREFORE, for and in consideration of the sum of One Dollar (\$1.00) and other good and valuable consideration, the receipt of which is hereby acknowledged, Assignor has sold, assigned, transferred and conveyed, and does hereby sell, assign, transfer and convey to Assignee, its successors and assigns, the entire right, title and interest in and to the aforesaid Invention and Rights, except that Assignee hereby grants back to the Assignor a royalty free non-transferable license to make and use the Invention under the Rights for educational and research purposes, only. The aforesaid assignment includes the right in and to all income, royalties, damages and payments now or hereafter due or payable with respect to any Letters Patent which may be granted, and in and to all causes of action (either in law or in equity), and the right to sue, counterclaim, and recover for past, present and future infringement of the rights assigned or to be assigned under this Assignment, as fully and entirely as the same would have been held and enjoyed by Assignor if this sale and assignment had not been made;

AND Assignor hereby authorizes and requests the appropriate governmental officials to issue any and all such United States or foreign Letters Patent under said invention, or resulting from any of said applications thereof, to the Assignee, as the assignee of the entire right, title and interest in and to the same;